THE NORTH AMERICAN SPECIES OF HOLOTROCHUS ERICH-SON (COLEOPTERA: STAPHYLINIDAE), WITH DESCRIP-TIONS OF TWO NEW SPECIES.

BY EDWARD A. CHAPIN, Associate Entomologist, Taxonomic Investigations.

Two species of this genus have heretofore been described from North America. A third species from the mountains of Arizona has for many years remained undescribed in the Hubbard and Schwarz collection and recently a fourth species was collected by Dr. W. E. Hinds at Baton Rouge, La. This last is of considerable interest as it was taken from borings in an insulated electric cable.

The following dichotomous table will serve to elucidate the more salient characteristics of these species:

1. Abdominal segments with fine but distinct remnants of lateral marginal lines; median length of pronotum less than length of elytral suture (ratio of pronotal length to elvtral suture length 25:33)...laevicauda Lec. Abdominal segments with no trace of lateral marginal lines; length of

2. Length of pronotum greater than length of elvtral suture (ratio of pro-

notal length to elytral suture length 23:20); elytra rugose-punctate...... brachypterus Fyl.

Length of pronotum equal to length of elvtral suture (by measurement);

3. First to third abdominal sternites virtually impunctate; length 2.5 mm.....

parvulus, n. sp. Second and third abdominal sternites coarsely and sparsely punctured;

length 3.7 mm. arizonicus, n. sp.

Holotrochus laevicauda (Leconte).

Lispinus laevicauda Lec., 1866, Proc. Acad. Nat. Sci. Philadelphia, Vol. 18, p. 376.

Holotrochus laevicauda (Lec.) Lec., 1877, Trans. Amer. Ent. Soc., Vol. 6, p. 216.

This species is represented in the National Museum collection by eight specimens from Grand Ledge, Michigan, collected by Hubbard and Schwarz and by a single specimen from Frankfort, Kentucky, Aug. 18, H. Soltau.

Holotrochus brachypterus Fauvel.

Holotrochus minor Leconte, 1877, Trans. Amer. Ent. Soc., Vol. 6, p. 216. (nec minor Fyl.).

Holotrochus brachypterus Fvl., 1905, Rev. d'Ent., Vol. 24, p. 136. (minor Lec. nec Fvl. renamed).

Five specimens of this species are in the Museum collection. one of which (Enterprise, Florida, June 7, Hubbard and Schwarz) was determined as this species by Fauvel; other specimens are from Cedar Keys, Florida, June 6, and Crescent City, Florida (both Hubbard and Schwarz), New Orleans, Louisiana, Dec. 2, H. Soltau, and Cape Henry, Virginia, May 22, 1927, H. S. Barber. This last specimen greatly extends the known geographical range of the species.

Holotrochus parvulus, n. sp.

Castaneous, dorsum of abdomen darker. Head finely, sparsely but distinctly punctured above, sides and underpart coarsely alutaceous, impunctate. Eves small, hardly prominent, above each three or four coarse punctures. Antennae shorter than head and thorax combined, first segment stout and twice as long as thick, second shorter but of equal thickness, third as long as first but more slender, fourth and fifth globose and equal, sixth to eleventh incrassate, eleventh conical. Pronotum broader than long (length-width ratio 23:27), lateral margins feebly curved, surface deeply, finely and sparsely punctured, punctures less frequent and more fine near lateral margins. Scutellum with a few coarse punctures. Elytra slightly broader across humeri than length of suture (length-width ratio 23:26), sutural stria of each entire, punctation rather fine and sparse, lateral margin sharp and evenly curved from base to apex, epipleura shining, minutely punctulate. Abdominal tergites and fourth and fifth sternites sparsely but coarsely punctate, surface of tergites shining, of sternites strongly alutaceous, fifth segment as long as third and fourth together. Legs short, femora stout, tibiae incrassate distally, anterior tibiae with a few spinules on outer margin, inner margin sinuate.

Length: 2.5 mm.

Type and *paratype*.—U. S. N. M., No. 40888, Baton Rouge, La., Jan. 28, 1928, boring in insulated electric cable, W. E. Hinds, collector.

Holotrochus arizonicus, n. sp.

Piceous, elytra, antennae and legs castaneous. Head finely and sparsely punctured, the punctures of two sizes intermingled, above each eye a group of coarse punctures, sides and underpart alutaceous. Antennae not as long as head and thorax together, first segment stout and as long as the second and third together, second shorter than third, fourth to eleventh incrassate, eleventh conical. Pronotum broader than long (length-width ratio 31:39), lateral margins arcuate in anterior three-fifths, straight in posterior two-fifths, posterior angles slightly obtuse, rounded. Surface very sparsely and finely punctate, with an ill-defined depression within each posterior angle. Scutellum impunctate, rarely with one, two or three coarse punctures. Elytra broader across humeri than length of suture (length-width ratio 30:37), punctures coarse and sparse, surface slightly irregular. Just inside the lateral margin there is a row of punctures which are more coarse and deep than the others. Epipleura smooth, impunctate. Abdominal segments without trace of lateral margins, surface coarsely alutaceous, sparsely set with coarse, shallow punctures. Underparts of thorax coarsely alutaceous laterally, metasternum with a few fine punctures. Legs moderately long (for the genus), femora stout but not conspicuously swollen, tibiae incrassate distally, anterior tibiae with a row of spinules, of which the apical two are larger, on the outer margin, inner margin sinuate.

Length: 3.7 mm.

Type and *seventeen paratypes.*—U. S. N. M., No. 40887, Santa Rita Mountains, Arizona, May 21, Hubbard and Schwarz collection.

With the above lot of specimens I have associated a single individual from the Chiricahua Mountains, Ariz., July 3, Hubbard and Schwarz. The following differences have been observed between it and the type specimen of *H. arizonicus:* Length 4 mm., punctures of elytra slightly less conspicuous, pronotum slightly longer proportionately. It does not appear to deserve a specific name.

HESPEROLABOPS PERISCOPIS, A NEW PERISCOPIC BUG FROM SALVADOR, WITH A NOTE ON THE TEXAS MEMBER OF THIS GENUS (HEMIPTERA, MIRIDAE).¹

BY HARRY H. KNIGHT, Ames, Iowa.

The writer has recently received from Mr. W. L. McAtee for identification, a remarkable Mirid which he aptly called a periscopic bug. I find it to be an apparently undescribed species belonging in the genus *Hesperolabops* Kirkaldy. This genus is remarkable in that the species have the eyes elevated on long, more or less erect peduncles, producing in effect what might be termed periscopic eyes.

Hesperolabops periscopis, new species.

Differs from *gelastops* Kirk. in the more strongly elevated and less divergent eyes, narrower vertex, and in the coarsely punctate pronotum; sanguineous, of the dorsum only the apical half of clavus, inner angles of corium and the membrane blackish.

Q. Length 6.2 mm., width 2.7 mm. Head: width across outer margins of eyes at top 1.15 mm., between inside margins at top .68 mm., width between peduncles at base .33 mm., from vertex to top of eye .62 mm., lateral width of eye .33 mm., height of an eye from lateral aspect .56 mm. Rostrum, length 2.6 mm., reaching to fifth ventral segment, sanguineous like the head with only tip black. Antennae: segment I, length .62 mm., red, becoming darker near apex; II, 1.92 mm., black, nearly equal to segment I in thickness, finely and closely pubescent; III, broken. Pronotum: length 1.18 mm., width at base 1.92 mm.; coarsely and closely punctate on disk and basal half of propleura, collar flattened and with punctures above; calli strongly convex, impunc-

¹Contribution from the Department of Zoology and Entomology, Iowa State College, Ames, Iowa.